I began my research into hypoxia at high altitudes after a conversation with my professor. I asked Dr. Downey for examples in regards to a topic suitable for our assignment: discussing and researching coupled human and natural systems. After asking about my interests in the field of ecological anthropology, I mentioned to him that I am an immigrant from an area where people reside at high altitudes. He explained to me the multitude of adaptations experienced by high altitude dwellers in order to face constant hypoxia. Although the adaptations discussed in my research paper are not seen in people from the Zagros Mountains where I am from, I became interested in adaptations to hypoxia experienced by other native high altitude residents.

I used McKeldin library’s print resources as well as the many databases students can access through the library’s website. I realized to understand adaptations to hypoxia, I must first have a clear understanding of what hypoxia is and how it affects humans. I created a list of topics I would need to research individually: hypoxia, high altitude residence, and human adaptability. After conducting preliminary research, I realized in order to fully understand hypoxia, one must have basic knowledge of the respiratory system and oxygen consumption. Later on, I also added prenatal health to my research topics, as many adaptations were studied in pregnant women, their fetuses, and infants.

In my use of databases, I searched from the categories of Anthropology, Biology, Geography, and Science on the university libraries’ website. These categories link to various databases that contain sources in regards to the aforementioned topics. I found each category had multiple databases that were unrelated to my topic, so I searched through the lists of databases to find those most suitable. The keywords I used in my searches once I had chosen a database to query were: hypoxia, adaptations, and native. After browsing through several articles, I discovered two locations where adaptations to hypoxia can be observed. I then further searched databases adding the keywords Tibet and Andes.

Throughout my research I soughted assistance from my professor several times. When I had explained to him that I found data from Tibet and the Andes, he recommended that I conduct a cross cultural analysis. This changed the entire format and tone of my research paper from focusing on general adaptations to hypoxia to a comparative study of adaptations to hypoxia from two locations. It also allowed me to utilize other sources from books as opposed to solely relying on articles; this was because adaptations in the Tibetan area had been studied for much longer. There were more print sources available, although many were outdated.

While selecting the sources I found, I looked for several criteria: references, data, and date of publication. References were a key point for choosing articles which I would incorporate into my essay. Articles that cited Moore, et al were very factual and useful as Moore helped pioneer research in the topic. Date of publication was also key because in 2010, Simonson, et al published an article which showed genetic evidence for the adaptations seen in people of the Tibetan area. Thus, many articles that attributed adaptations to other causes were no longer accurate.

I divided my research procedure into several steps. The first step has been described in latter paragraphs, finding and selecting sources. I narrowed down sources I had found to 6 articles that were the most useful. In the evaluation of my sources, I read and took detailed notes from the 6 articles. What proved to be most useful in my research ventures was finding
sources cited as references in the articles I read. I found many scientific papers and research studies about hypoxia by doing this.

Throughout the research process I learned about how to structure performing research. I learned a great deal about time management and organization. After many blunders in which I couldn’t relocate articles found previously, I realized the best thing to do was save all articles and notes to a folder on my computer and Google Drive. This way, I could access them from any location, whether from home or at the library. I know this realization will prove more useful to me over time, as I conduct my own research into areas concerning ecological anthropology and as I pursue a career as an attorney.

Reflecting back on my research experience, I would like to change the format of note taking I conducted. As mentioned earlier, I had some trouble keeping track of the research I did from home and from the library. I would also like to allot more time for researching ethnographic accounts of these adaptation, as my research paper mostly focuses on employing biological studies. I feel the library could be a better place for the research needs of students if the availability of research guides listed on the website was more well-know. I was not aware the library employed research guides, until I had already completed most of my research. I feel if their availability was wider known, more students would utilize them and be able to conduct more productive research.